

**4-Aminoquinazoline derivatives, and their use as medicine.**

Patent Number: EP0579496

Publication date: 1994-01-19

Inventor(s): LEE SUNG JAI (US); KONISHI YOSHITAKA C O MINASE R (JP); MACINA OREST TARAS (US); KONDO KIGEN C O MINASE RES INS (JP); YU DINGWEI TIM (US)

Applicant(s):: ONO PHARMACEUTICAL CO (JP)

Requested Patent:  EP0579496

Application Number: EP19930305557 19930715

Priority Number (s): US19930076431 19930614; US19920913473 19920715

IPC Classification: C07D401/04 ; C07D401/06 ; C07D405/04 ; C07D409/04 ; C07D413/14 ; C07D401/14 ; C07D409/14 ; A61K31/505

EC Classification: C07D401/04, C07D401/06, C07D401/14, C07D405/04, C07D409/04, C07D409/14,  
C07D521/00B1C8, C07D521/00B2H, C07F7/08C6BEquivalents: CA2100626, JP2657760B2, JP2923742B2,  JP6192235,  JP8099962

---

**Abstract**

---

The compounds of the formula: wherein R<1> is H or alkyl; Y is bond or alkylene; A is (i) -CyA-(R<2>)l, (ii) -O-R<0> or -S(O)p-R<0> or (iii) -NR<1><6>R<1><7>; CyA is (1) 3-7 membered monocyclic carbocyclic ring, (2) 4-7 membered monocyclic hetero ring containing as hetero atoms, one N atom, one N and one O atoms, two N and one O atoms, or one N and two O atoms, (3) 4-7 membered monocyclic hetero ring containing as hetero atoms, 1 or 2 O or S atoms; R<2> is (1) H, (2) alkyl, (3) alkoxy, (4) -COOR<5>, in which R<5> is H or alkyl, (5) -NR<6>R<7>, (6) -SO2NR<6>R<7>, (7) halogen, (8) CF<sub>3</sub>, (9) NO<sub>2</sub> or (10) CF<sub>3</sub>O; Z is bond, methylene, ethylene, vinylene or ethynylene; R<3> is H, alkyl, alkoxy, halogen or CF<sub>3</sub>; and acid addition salts thereof, salts thereof, and hydrates thereof; have inhibitory effect on cGMP-PDE, or additionally on TXA<sub>2</sub> synthetase.

Data supplied from the esp@cenet database - I2

- Please see exhibit 34 -